GenCore version 4.5

OM nucleic - nucleic search, using sw model

Run on: March 9, 2002, 01:06:59 ; Search time 755.06 Seconds
(without alignments)
24.980 Million cell updates/sec

Title: US-09-851-670-13
Perfect score: 22
Sequence: 1 cacccgctctctcgacaatgga 22

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 930621 seqs, 428662619 residues

Total number of hits satisfying chosen parameters: 1026190

Minimum DB seq length: 0
Maximum DB seq length: 60

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : N_Geneseq_1101:*
1: /SIDS2/gcgdata/geneseq/geneseqn/NA1980.DAT:*
2: /SIDS2/gcgdata/geneseq/geneseqn/NA1981.DAT:*
3: /SIDS2/gcgdata/geneseq/geneseqn/NA1982.DAT:*
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5: /SIDS2/gcgdata/geneseq/geneseqn/NA1984.DAT:*
6: /SIDS2/gcgdata/geneseq/geneseqn/NA1985.DAT:*
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10: /SIDS2/gcgdata/geneseq/geneseqn/NA1989.DAT:*
11: /SIDS2/gcgdata/geneseq/geneseqn/NA1990.DAT:*
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13: /SIDS2/gcgdata/geneseq/geneseqn/NA1992.DAT:*
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15: /SIDS2/gcgdata/geneseq/geneseqn/NA1994.DAT:*
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21: /SIDS2/gcgdata/geneseq/geneseqn/NA2000.DAT:*
22: /SIDS2/gcgdata/geneseq/geneseqn/NA2001.DAT:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.		Score	% Query Match	Length	DB	ID	Description
c	1	15.2	69.1	24	14	AAQ41807	Baculovirus C2 com
c	2	14.6	66.4	45	22	AAH46031	BCG derived synthe
c	3	14.6	66.4	51	21	AAA77485	Human Gln synthase
c	4	14.2	64.5	38	21	AAA63755	PCR primer used to
	5	13.6	61.8	51	21	AAA13947	Der pII B cell epi
	6	13	59.1	28	21	AAZ58426	PCR primer used in
	7	13	59.1	28	21	AAZ58428	PCR primer used in
	8	13	59.1	37	20	AAX23269	Cytomegalovirus PC
c	9	13	59.1	51	21	AAA77484	Human Gln synthase
c	10	12.8	58.2	17	20	AAA17182	Aryl hydrocarbon n
c	11	12.6	57.3	24	19	AAV10088	K-ras LDR oligonuc
c	12	12.6	57.3	24	20	AAX87183	Fibroblast growth
	13	12.6	57.3	37	20	AAX23266	Cytomegalovirus PC
c	14	12.4	56.4	32	17	AAT33699	Mycobacterium heat
	15	12.4	56.4	42	22	AAF28152	Primer #5. Uniden
	16	12.4	56.4	47	21	AAZ67656	Human map-related
c	17	12.4	56.4	47	21	AAZ69434	Human map-related
	18	12.4	56.4	51	21	AAA77212	Human clone cg4396
c	19	12.4	56.4	51	22	AAH40912	Human SNP flanking
c	20	12.2	55.5	20	22	AAS11310	Human ANK gene PCR
	21	12.2	55.5	21	19	AAV18396	Synthetic HIV-1 PC
c	22	12.2	55.5	27	19	AAV10678	Rat Fas ligand-lik
c	23	12.2	55.5	27	22	AAC87667	Rat TL4 liver func
c	24	12.2	55.5	30	13	AAQ26520	Cross-over linker
	25	12.2	55.5	36	20	AAZ23101	HIV-1 DNA synthesi
	26	12.2	55.5	39	20	AAX18870	Maize SSR oligonuc
	27	12.2	55.5	41	19	AAV50620	Brassica sp. polym
	28	12.2	55.5	42	18	AAT59413	Human papillomavir
	29	12.2	55.5	45	20	AAV82014	Human beta follicl
c	30	12.2	55.5	47	21	AAZ66472	Human map-related
c	31	12.2	55.5	50	19	AAV32005	Flax SAD gene prom
c	32	12.2	55.5	50	20	AAX52153	Synthetic plasmid
	33	12.2	55.5	50	20	AAX52079	Synthetic plasmid
c	34	12.2	55.5	51	16	AAQ76322	Human native extra
	35	12	54.5	20	20	AAZ02597	PCR primer used to
	36	12	54.5	31	12	AAQ11631	Probe PM#78 corres
	37	12	54.5	31	14	AAQ40308	Labelled probe CJ
	38	12	54.5	32	16	AAQ92439	TCR beta constant
	39	12	54.5	39	15	AAQ74788	Probe for stem cel
	40	12	54.5	39	15	AAQ74794	Probe for Interleu
	41	12	54.5	47	21	AAZ65715	Human map-related
c	42	12	54.5	50	21	AAA76203	Human prostate spe
c	43	12	54.5	50	22	AAS05277	Mouse ES cell nucl
	44	11.8	53.6	18	21	AAA63450	C-1027 gene cluste
c	45	11.8	53.6	20	20	AAZ02154	PCR primer used to

ALIGNMENTS

RESULT 1
AAQ41807/c
ID AAQ41807 standard; DNA; 24 BP.
XX
AC AAQ41807;
XX
DT 03-SEP-1993 (first entry)
XX
DE Baculovirus C2 complex binding site #4.
XX
KW Myc; c-myc; mammalian; E box; cancer; therapy; C1; C2; C2'; complex;
KW homo-oligomer; hetero-oligomer; myogenin; Max; oncoprotein; primer;
KW probe; electrophoretic mobility shift assay; EMSA; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT protein_bind 15..20
FT /*tag= a
FT /note= "C2 complex binding site"
XX
PN WO9308701-A.
XX
PD 13-MAY-1993.
XX
PF 09-OCT-1992; 92WO-US08603.
XX
PR 30-OCT-1991; 91US-0785567.
XX
PA (GEHO) GEN HOSPITAL CORP.
XX
PI Kingston RE, Papoulas O;
XX
DR WPI; 1993-167291/20.

```
XX
PT   Prodn. of c-Myc protein from mammalian cells - and detection of c-
PT   Myc inhibitors for use in cancer therapy
XX
PS   Disclosure; Fig 7a; 101pp; English.
XX
CC   The sequences given in AAQ41767-825 represent sequences which are
CC   bound in an electrophoretic mobility shift assay (EMSA) by Myc.
CC   The isolated sequences contain the central E box core of CACGTG which
CC   binds very weakly with Myc homo-oligomers (C1 complex), but more
CC   tightly with Myc hetero-oligomers (C2 complex). The C2 complex
CC   requires a 26-29 kD factor in addition to Myc. The additional factor
CC   copurifies with Myc and resembles Max protein. A second copurifying
CC   40-50 kD factor has been identified (forming C2' complex). Sites
CC   selected by the C2' complex contain the core CAGCTG which bears
CC   remarkable homology to a myogenin binding site (see AAQ41763).
CC   Oligonucleotides containing the E box can be used in the purification
CC   of Myc from a mammalian source. See also AAQ41761-861. The isolated
CC   target sequences may be used in a method to inhibit c-Myc oncoprotein
CC   activity.
XX
SQ   Sequence 24 BP; 8 A; 5 C; 8 G; 3 T; 0 other;


  Query Match             69.1%;  Score 15.2;  DB 14;  Length 24;
  Best Local Similarity   85.0%;  Pred. No. 1.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1 cacccgctctctcgacaatg 20
           |||  |||||||||| |||
Db      20 CACGTGCTCTCTCGACTATG 1


RESULT   2
AAH46031/c
ID   AAH46031 standard; DNA; 45 BP.
XX
AC   AAH46031;
XX
DT   12-SEP-2001  (first entry)
XX
DE   BCG derived synthetic oligonucleotide 5.
XX
KW   Synthetic oligonucleotide; dinucleotide repeat; cytostatic; apoptosis;
KW   cell cycle arrest; cell proliferation; caspase; cytokine; interleukin;
KW   tumour necrosis factor; TNF; cancer; carcinoma; sarcoma; leukemia;
KW   lymphoma; ss; BCG.
XX
OS   Mycobacterium bovis.
OS   Synthetic.
XX
PN   WO200144465-A2.
XX
PD   21-JUN-2001.
XX
PF   12-DEC-2000; 2000WO-CA01467.
XX
PR   13-DEC-1999;   99US-0170325.
PR   29-AUG-2000; 2000US-0228925.
XX
PA   (BION-) BIONICHE LIFE SCI INC.
XX
PI   Phillips NC,  Filion MC;
XX
DR   WPI; 2001-398150/42.
XX
PT   Composition comprising synthetic oligonucleotides which comprise
PT   multiple repeats of dinucleotides such as GT, TG useful for treating
PT   cancer by inducing cell cycle arrest, inhibiting proliferation,
PT   activating caspases  -
XX
PS   Example 20; Page 34; 77pp; English.
XX
CC   The present sequence is that of a synthetic BCG (Bacillus
CC   Calmette-Guerin) derived oligonucleotide useful to the invention. The
CC   invention relates to a composition, comprising a 2 to 20 base 3'-OH,
CC   5'-OH synthetic oligonucleotide which comprises multiple repeats of
CC   dinucleotides such as GT, TG, etc., according to specific formula and
CC   having cytostatic activity. The oligonucleotide compositions are useful
CC   for inducing cell cycle arrest, inhibition of proliferation, activation
CC   of caspases and induction of apoptosis or production of cytokines such as
CC   interleukin (IL)-1-beta, IL-6, IL-10, IL-12 and tumour necrosis factor
CC   (TNF)-alpha by immune system cells, in an animal having cancer such as
CC   primary carcinoma, secondary carcinoma, primary sarcoma and secondary
CC   sarcoma such as, leukemia, lymphoma, breast, prostate, colorectal,
CC   ovarian or bone cancer. The compositions induce apoptosis independent of
CC   Fas, p53/p21, p21/waf-1/CIP, p15(ink4B), p16(ink4), drug resistance,
CC   caspase 3, transforming growth factor (TGF)-beta 1 receptor and hormone
CC   dependence.
XX
SQ   Sequence 45 BP; 10 A; 17 C; 14 G; 4 T; 0 other;


  Query Match             66.4%;  Score 14.6;  DB 22;  Length 45;
  Best Local Similarity   81.0%;  Pred. No. 2.9e+02;
  Matches   17;  Conservative    0;  Mismatches    4;  Indels    0;  Gaps    0;

Qy       1 cacccgctctctcgacaatgg 21
           |||| || | ||||||| ||||
Db      30 CACCGGCGCCCTCGACGATGG 10


RESULT   3
AAA77485/c
ID   AAA77485 standard; cDNA; 51 BP.
XX
AC   AAA77485;
XX
DT   16-NOV-2000  (first entry)
XX
DE   Human Gln synthase AT-ase-like gene polymorphic site, SEQ ID NO:1168.
XX
KW   Human; single nucleotide polymorphism; SNP;
KW   detection; identification; gene therapy; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   variation       replace (26,C)
FT                   /*tag= a
XX
PN   WO200029623-A2.
XX
PD   25-MAY-2000.
XX
PF   17-NOV-1999;   99WO-US27293.
XX
PR   17-NOV-1998;   98US-0109024.
PR   16-NOV-1999;   99US-0109024.
XX
PA   (CURA-) CURAGEN CORP.
XX
PI   Shimkets RA,  Leach MD;
XX
DR   WPI; 2000-387826/33.
DR   P-PSDB; AAB11804.
XX
PT   Human nucleic acids containing single nucleotide polymorphisms, useful
PT   for treating a subject suffering, or at risk from a pathology due to
PT   the presence of a sequence polymorphism -
XX
PS   Claim 1; Page 511; 543pp; English.
XX
CC   Sequences AAA76318-A77509 represent 1192 human nucleic acid sequences
CC   which contain single nucleotide polymorphisms (SNPs). Sequences 1 to
CC   1112 (AAA76318-A77429) are consecutive pairs of nucleotides which
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CC contain silent SNPs. Sequences 1113 to 1192 (AAA77430-A77509) are
CC consecutive pairs of nucleotides containing SNPs which result in changes
CC in the corresponding amino acid sequences (AAB11749-B11828). The SNPs in
CC sequences 1113 to 1128 (AAA77430-A77445) lead to conservative amino acid
CC changes, while those in sequences 1129 to 1186 (AAA77446-A77503) result
CC in non- conservative changes. The SNPs in sequences 1187 to 1192
CC (AAA77504-A77509) generate frameshift mutations. The invention also
CC relates to a method of detecting a polymorphic site in a nucleic acid and
CC a method of determining the relatedness of two nucleic acids. It also
CC encompasses peptides containing polymorphic sites, antibodies raised
CC against such peptides, and a method of detecting polymorphic
CC proteins/peptides using the antibodies. The nucleic acids are useful for
CC gene therapy of an individual having, suspected of having, or at risk of
CC developing a pathological condition due to the presence of a sequence
CC polymorphism. Such treatment would comprise administration of the
CC wild-type nucleic acid sequence. Antibodies raised against polymorphic
CC peptides can also be used in the treatment of such individuals.
XX
SQ Sequence 51 BP; 12 A; 10 C; 16 G; 13 T; 0 other;

Query Match 66.4%; Score 14.6; DB 21; Length 51;
Best Local Similarity 81.0%; Pred. No. 2.9e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1 cacccgctctctcgacaatgg 21
||| | | |||||||| ||||
Db 27 CACTCCCACTCTCGACCATGG 7

RESULT 4
AAA63755/c
ID AAA63755 standard; DNA; 38 BP.
XX
AC AAA63755;
XX
DT 04-DEC-2000 (first entry)
XX
DE PCR primer used to amplify cDNA encoding murine NL-1.
XX
KW Neprilysin; neutral endopeptidase metallopeptidase-like enzyme;
KW NEP-like enzyme; protein production; protein secretion;
KW neurological disease; Alzheimer's disease; pain; psychiatric disorder;
KW fertility; bone disease; abnormal phosphate metabolism; PCR primer; ss.
XX
OS Mus sp.
XX
PN WO200047750-A2.
XX
PD 17-AUG-2000.
XX
PF 11-FEB-2000; 2000WO-CA00147.
XX
PR 11-FEB-1999; 99CA-2260376.
XX
PA (UYMO-) UNIV MONTREAL.
XX
PI Desgroseillers L, Boileau G;
XX
DR WPI; 2000-549148/50.
XX
PT Novel neutral endopeptidase-like metallopeptidase polypeptides and
PT polynucleotides, used to screen for related sequences and enzyme
PT inhibitors, used for the treatment of NL-3 related bone disorders -
XX
PS Disclosure; Page 12; 59pp; English.
XX
CC PCR primers AAA63755-56 were used to amplify a murine cDNA sequence
CC encoding a neutral endopeptidase metallopeptidase (NEP)-like
CC polypeptide, designated NL-1. The specification also describes NL-2 and
CC NL-3. The NL enzymes are used to test for specific inhibitors. The
CC N-terminal region of the enzymes can be used to promote production and
CC secretion of foreign proteins and active biopeptides, using chimeric
CC constructs containing the foreign protein downstream from and in phase
CC with the N-terminal region. The NL enzymes are have been localised to
CC the brain, and may be useful in the treatment of neurological diseases
CC such as Alzheimer's disease, pain, and psychiatric disorders. NL enzymes
CC have also been localised to the testis and ovaries, and may be used to
CC control fertility. They have also been localised to bones, and may be
CC used to treat bone diseases, and abnormal phosphate metabolisms related
CC to improper peptide processing by the NL-3 enzyme.
XX
SQ Sequence 38 BP; 10 A; 7 C; 16 G; 5 T; 0 other;

Query Match 64.5%; Score 14.2; DB 21; Length 38;
Best Local Similarity 84.2%; Pred. No. 4.5e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 3 cccgctctctcgacaatgg 21
|| |||||||| || ||||
Db 22 CCTGCTCTCTCCACCATGG 4

RESULT 5
AAA13947
ID AAA13947 standard; DNA; 51 BP.
XX
AC AAA13947;
XX
DT 07-AUG-2000 (first entry)
XX
DE Der pII B cell epitope PCR antisense primer SEQ ID NO:10.
XX
KW T cell epitope; B cell epitope; allergy; allergen; antigenic;
KW antiallergic; antiasthmatic; antiinflammatory; dermatological;
KW immunosuppressive; vaccine; rhinitis; sinusitis; bronchial asthma;
KW atopic dermatitis; acute urticaria; chronic urticaria; PCR primer;
KW gastro-intestinal syndrome; food allergen; oro-pharyngeal syndrome;
KW anaphylactic reaction; drug hypersensitivity; allergic reaction; ss.
XX
OS Dermatophagoides pteronyssinus.
XX
PN WO200006694-A2.
XX
PD 10-FEB-2000.
XX
PF 20-JUL-1999; 99WO-BE00092.
XX
PR 30-JUL-1998; 98EP-0870167.
XX
PA (UNIO) UCB SA.
XX
PI Saint-Remy J, Jacquemin M;
XX
DR WPI; 2000-422470/36.
XX
PT New compound for prevention and treatment of allergies comprises at
PT least one allergen antigenic determinant recognized by a B cell and at
PT least one antigenic determinant which does not trigger T cell
PT activation -
XX
PS Example 2; Page 26; 50pp; English.
XX
CC The present invention describes a compound (I) for the prevention and/or
CC treatment of allergy. The compound comprises at least one allergen
CC antigenic determinant (i) recognised by a B cell or an antibody secreted
CC by a B cell of a non-atopic individual and at least one antigenic
CC determinant (ii) different from the allergen that triggers T cell
CC activation. (I) has antiallergic, antiasthmatic. antiinflammatory.
CC dermatological and immunosuppressive activities, and can be used in a
CC vaccine. (I) may be used in a pharmaceutical or cosmetic medicament to
CC treat and/or prevent allergies or a disease of allergic origin,
CC especially hypersensitivities. These include rhinitis, sinusitis,
CC bronchial asthma, atopic dermatitis, some forms of acute and chronic
CC urticaria, gastro-intestinal syndromes associated with the ingestion of

```
CC   food allergens, oro-pharyngeal syndrome, anaphylactic reactions
CC   associated with drug hypersensitivities and/or a mixture of these. The
CC   use of (I) in the treatment of allergic conditions avoids the need for
CC   drug treatment, which often causes undesirable side-effects. Also, prior
CC   art drug therapies alleviate symptoms, but do not influence their
CC   causes, however (I) actually combats the cause of an allergic reaction.
CC   The present sequence represents a PCR primer for a B cell epitope from
CC   Der pII, which is used in an example from the present invention.
XX
SQ   Sequence 51 BP; 10 A; 13 C; 12 G; 16 T; 0 other;


  Query Match             61.8%;  Score 13.6;  DB 21;  Length 51;
  Best Local Similarity   80.0%;  Pred. No. 9.4e+02;
  Matches   16;  Conservative    0;  Mismatches    4;  Indels    0;  Gaps    0;

Qy       2 acccgctctctcgacaatgg 21
           ||||||| ||| || || ||
Db      12 acccgctatctagagaacgg 31


RESULT   6
AAZ58426
ID   AAZ58426 standard; DNA; 28 BP.
XX
AC   AAZ58426;
XX
DT   23-MAY-2000  (first entry)
XX
DE   PCR primer used in hnRNP A2-EGFP reporter construction.
XX
KW   Human; hnRNP A2; promoter; ubiquitous chromatin opening element;
KW   UCOE; gene therapy; epidermal growth factor; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200005393-A2.
XX
PD   03-FEB-2000.
XX
PF   21-JUL-1999;   99WO-GB02357.
XX
PR   21-JUL-1998;   98GB-0015879.
PR   09-NOV-1998;   98US-0107688.
PR   23-MAR-1999;   99GB-0006712.
PR   01-APR-1999;   99US-0127410.
PR   23-APR-1999;   99GB-0009494.
PR   12-MAY-1999;   99US-0134016.
XX
PA   (COBR-) COBRA THERAPEUTICS LTD.
XX
PI   Antoniou M,  Crombie R;
XX
DR   WPI; 2000-182712/16.
XX
PT   Polynucleotide comprising an ubiquitous chromatin opening element that
PT   is not derived from a locus control region, useful in gene therapy  -
XX
PS   Example; Page 51; 187pp; English.
XX
CC   This nucleotide sequence is that of a primer used in the PCR
CC   amplification of 80 bp of DNA 5' to exon 2 of the human HnRNA A2 gene.
CC   The PCR product was used in the construction of a hnRNP A2-epidermal
CC   growth factor promoter reporter construct.  The human hnRNP A2 gene
CC   includes a ubiquitous chromatin opening element (UCOE, see AAZ58411).
CC   UCOEs open chromatin or maintain chromatin in an open state and
CC   facilitate reproducible expression of an operably linked gene in
CC   cells of at least 2 different tissue types.  The invention
CC   provides UCOEs, vectors and host cells useful in gene therapy, as
CC   well as transgenic animals.
XX
SQ   Sequence 28 BP; 9 A; 8 C; 5 G; 6 T; 0 other;


  Query Match             59.1%;  Score 13;  DB 21;  Length 28;
  Best Local Similarity   76.2%;  Pred. No. 1.8e+03;
  Matches   16;  Conservative    0;  Mismatches    5;  Indels    0;  Gaps    0;

Qy       2 acccgctctctcgacaatgga 22
           ||| | ||||||  ||| |||
Db       1 accggttctctctgcaaagga 21


RESULT   7
AAZ58428
ID   AAZ58428 standard; DNA; 28 BP.
XX
AC   AAZ58428;
XX
DT   23-MAY-2000  (first entry)
XX
DE   PCR primer used in hnRNP A2-EGFP reporter construction.
XX
KW   Human; hnRNP A2; promoter; ubiquitous chromatin opening element;
KW   UCOE; gene therapy; epidermal growth factor; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200005393-A2.
XX
PD   03-FEB-2000.
XX
PF   21-JUL-1999;   99WO-GB02357.
XX
PR   21-JUL-1998;   98GB-0015879.
PR   09-NOV-1998;   98US-0107688.
PR   23-MAR-1999;   99GB-0006712.
PR   01-APR-1999;   99US-0127410.
PR   23-APR-1999;   99GB-0009494.
PR   12-MAY-1999;   99US-0134016.
XX
PA   (COBR-) COBRA THERAPEUTICS LTD.
XX
PI   Antoniou M,  Crombie R;
XX
DR   WPI; 2000-182712/16.
XX
PT   Polynucleotide comprising an ubiquitous chromatin opening element that
PT   is not derived from a locus control region, useful in gene therapy  -
XX
PS   Example; Page 51; 187pp; English.
XX
CC   This nucleotide sequence is that of a primer used in the PCR
CC   amplification of 1 kb of DNA 5' to exon 2 of the human HnRNA A2 gene.
CC   The PCR product was used in the construction of a hnRNP A2-epidermal
CC   growth factor promoter reporter construct.  The human hnRNP A2 gene
CC   includes a ubiquitous chromatin opening element (UCOE, see AAZ58411).
CC   UCOEs open chromatin or maintain chromatin in an open state and
CC   facilitate reproducible expression of an operably linked gene in
CC   cells of at least 2 different tissue types.  The invention
CC   provides UCOEs, vectors and host cells useful in gene therapy, as
CC   well as transgenic animals.
XX
SQ   Sequence 28 BP; 9 A; 8 C; 5 G; 6 T; 0 other;


  Query Match             59.1%;  Score 13;  DB 21;  Length 28;
  Best Local Similarity   76.2%;  Pred. No. 1.8e+03;
  Matches   16;  Conservative    0;  Mismatches    5;  Indels    0;  Gaps    0;

Qy       2 acccgctctctcgacaatgga 22
           ||| | ||||||  ||| |||
Db       1 accggttctctctgcaaagga 21


RESULT   8
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AAX23269
ID   AAX23269 standard; DNA; 37 BP.
XX
AC   AAX23269;
XX
DT   11-JUN-1999  (first entry)
XX
DE   Cytomegalovirus PCR primer ISOCMV002-AT DNA.
XX
KW   Nucleic acid amplification; 3' overhang; strand displacing polymerase;
KW   isothermal; PCR primer; ss.
XX
OS   Synthetic.
OS   Human cytomegalovirus.
XX
PN   WO9909211-A1.
XX
PD   25-FEB-1999.
XX
PF   12-AUG-1998;   98WO-GB02427.
XX
PR   13-AUG-1997;   97GB-0017061.
XX
PA   (TEPN-) TEPNEL MEDICAL LTD.
XX
PI   Coutts JC,  Oultram JD;
XX
DR   WPI; 1999-190177/16.
XX
PT   Amplifying a nucleic acid sequence by strand displacement - None
PT   given
XX
PS   Example 4; Page 17; 41pp; English.
XX
CC   This invention describes a novel method for amplifying a nucleic acid
CC   sequence of a double-stranded molecule, using a restriction enzyme
CC   which cuts to leave a 3' overhang on the strand not to be amplified, and
CC   strand displacing polymerase. The method allows nucleic acid
CC   amplification without the inclusion of a modified restriction site
CC   required in the prior art strand displacement method, and may be
CC   effected isothermally, unlike prior art polymerase chain reaction
CC   methods.
XX
SQ   Sequence 37 BP; 9 A; 8 C; 9 G; 11 T; 0 other;


  Query Match             59.1%;  Score 13;  DB 20;  Length 37;
  Best Local Similarity   76.2%;  Pred. No. 1.8e+03;
  Matches   16;  Conservative    0;  Mismatches    5;  Indels    0;  Gaps    0;

Qy       2 acccgctctctcgacaatgga 22
           | || || ||||||| ||||
Db       8 aaccactgtctcgacggtgga 28


RESULT   9
AAA77484/c
ID   AAA77484 standard; cDNA; 51 BP.
XX
AC   AAA77484;
XX
DT   16-NOV-2000  (first entry)
XX
DE   Human Gln synthase AT-ase-like gene polymorphic site, SEQ ID NO:1167.
XX
KW   Human; single nucleotide polymorphism; SNP;
KW   detection; identification; gene therapy; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   variation       replace (26,T)
FT                   /*tag= a
XX
PN   WO200029623-A2.
XX
PD   25-MAY-2000.
XX
PF   17-NOV-1999;   99WO-US27293.
XX
PR   17-NOV-1998;   98US-0109024.
PR   16-NOV-1999;   99US-0109024.
XX
PA   (CURA-) CURAGEN CORP.
XX
PI   Shimkets RA,  Leach MD;
XX
DR   WPI; 2000-387826/33.
DR   P-PSDB; AAB11803.
XX
PT   Human nucleic acids containing single nucleotide polymorphisms, useful
PT   for treating a subject suffering, or at risk from a pathology due to
PT   the presence of a sequence polymorphism -
XX
PS   Claim 1; Page 510; 543pp; English.
XX
CC   Sequences AAA76318-A77509 represent 1192 human nucleic acid sequences
CC   which contain single nucleotide polymorphisms (SNPs). Sequences 1 to
CC   1112 (AAA76318-A77429) are consecutive pairs of nucleotides which
CC   contain silent SNPs. Sequences 1113 to 1192 (AAA77430-A77509) are
CC   consecutive pairs of nucleotides containing SNPs which result in changes
CC   in the corresponding amino acid sequences (AAB11749-B11828). The SNPs in
CC   sequences 1113 to 1128 (AAA77430-A77445) lead to conservative amino acid
CC   changes, while those in sequences 1129 to 1186 (AAA77446-A77503) result
CC   in non- conservative changes. The SNPs in sequences 1187 to 1192
CC   (AAA77504-A77509) generate frameshift mutations. The invention also
CC   relates to a method of detecting a polymorphic site in a nucleic acid and
CC   a method of determining the relatedness of two nucleic acids. It also
CC   encompasses peptides containing polymorphic sites, antibodies raised
CC   against such peptides, and a method of detecting polymorphic
CC   proteins/peptides using the antibodies. The nucleic acids are useful for
CC   gene therapy of an individual having, suspected of having, or at risk of
CC   developing a pathological condition due to the presence of a sequence
CC   polymorphism. Such treatment would comprise administration of the
CC   wild-type nucleic acid sequence. Antibodies raised against polymorphic
CC   peptides can also be used in the treatment of such individuals.
XX
SQ   Sequence 51 BP; 12 A; 11 C; 16 G; 12 T; 0 other;


  Query Match             59.1%;  Score 13;  DB 21;  Length 51;
  Best Local Similarity   76.2%;  Pred. No. 1.9e+03;
  Matches   16;  Conservative    0;  Mismatches    5;  Indels    0;  Gaps    0;

Qy       1 cacccgctctctcgacaatgg 21
           | | | | |||||||| ||||
Db      27 CGCTCCCACTCTCGACCATGG 7


RESULT  10
AAA17182/c
ID   AAA17182 standard; RNA; 17 BP.
XX
AC   AAA17182;
XX
DT   19-JUN-2000  (first entry)
XX
DE   Aryl hydrocarbon nuclear transport substrate sequence SEQ ID NO:408.
XX
KW   Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
KW   integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
KW   hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
KW   ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
KW   dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
KW   age related macular degeneration; inflammation; neovascular glaucoma;
KW   myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
```

KW tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX
OS Homo sapiens.
XX
PN WO9950403-A2.
XX
PD 07-OCT-1999.
XX
PF 24-MAR-1999; 99WO-US06507.
XX
PR 27-MAR-1998; 98US-0079678.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Pavco PA, Roberts E, Jarvis T, Coeshott C, McSwiggen JA;
XX
DR WPI; 1999-591315/50.
XX
PT Novel ribozymes for modulating the synthesis, expression and/or
PT stability of an mRNA encoding an angiogenic factors -
XX
PS Claim 53; Page 63; 305pp; English.
XX
CC The present invention describes enzymatic nucleic acid molecules with
CC RNA cleaving activity, which specifically cleave RNA encoded by an aryl
CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
CC and AAA19155 to AAA19222 represent their corresponding target sequences;
CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
CC AAA21596 to AAA21688 represent their corresponding target sequences;
CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
CC AAA23422 represent their corresponding target sequences. The ribozymes of
CC the invention are used for modulating the synthesis, expression and/or
CC stability of an mRNA encoding angiogenic factor, especially ARNT,
CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
CC especially used to treat cancer, diabetic retinopathy, age related
CC macular degeneration (ARMD), inflammation, and arthritis, as well as
CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
CC angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber
CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
CC and other syndromes and diseases related to the levels of ARNT, Tie-2,
CC integrin subunit alpha-6, or integrin subunit beta-3.
XX
SQ Sequence 17 BP; 3 A; 5 C; 6 G; 3 U; 0 other;

Query Match 58.2%; Score 12.8; DB 20; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.1e+03;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 6 gctctctcgacaatgg 21
|| |||| ||||||||
Db 17 GCCCTCTGGACAATGG 2

RESULT 11
AAV10088/c
ID AAV10088 standard; DNA; 24 BP.
XX
AC AAV10088;
XX
DT 14-JUL-1998 (first entry)
XX
DE K-ras LDR oligonucleotide probe/primer Tet-K-ras c61.5E.
XX
KW Ligation assay; detection; ligase detection reaction; LDR; probe;

KW thermostable mutant ligase; cancer; mutation; forensic analysis;
KW genetic disease; primer; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1
FT /*tag= a
FT /note= "labelled with Tet"
XX
PN WO9803673-A1.
XX
PD 29-JAN-1998.
XX
PF 15-JUL-1997; 97WO-US12195.
XX
PR 19-JUL-1996; 96US-0022535.
XX
PA (CORR) CORNELL RES FOUND INC.
PA (PURD) PURDUE RES FOUND.
XX
PI Barany F, Bergstrom DE, Khanna M, Luo J;
XX
DR WPI; 1998-120792/11.
XX
PT Detecting minority nucleic acid in presence of larger amounts of
PT closely related sequences - by ligase detection reaction with
PT specific oligonucleotide probes, also thermostable mutant ligase and
PT modified probes, used to detect cancer-related mutations
XX
PS Example 19; Fig 31B; 190pp; English.
XX
CC The present sequence represents a ligase detection reaction (LDR)
CC oligonucleotide probe used for the detection of K-ras codon 61, for use
CC in present invention. The present invention describes a method for the
CC detection of at least 1 minority target nucleic acid (I), present in a
CC sample also containing majority nucleic target nucleic acids (II) and
CC differing from (II) by at least 1 single-base change, insertion,
CC deletion or translocation. The method comprises first treating the
CC sample with: (a) ligase, and (b) at least 1 pair of target-specific
CC oligonucleotide probes (A) which can be ligated together when hybridised
CC adjacent to each other on their target sequence but have a mismatch that
CC prevents ligation on any other sequence. The reaction mixture is
CC subjected to at least 1 ligase detection reaction (LDR) cycle of
CC denaturation, hybridisation and ligation, to produce a detectable
CC ligation product that is distinguishable for each pair of probes. (A)
CC may hybridise to other sequences but will not then be ligated and will
CC be released during the denaturation step. The method is used to detect
CC cancer-associated mutations in the presence of excess wild-type allele.
CC The method can also be used to detect any bacterial, viral, fungal or
CC parasitic infection (including drug-resistant strains) and many genetic
CC diseases, it is also useful for environmental monitoring, forensic
CC analysis and for identifying organisms/quality control in the food
CC industry.
XX
SQ Sequence 24 BP; 7 A; 5 C; 7 G; 5 T; 0 other;

Query Match 57.3%; Score 12.6; DB 19; Length 24;
Best Local Similarity 78.9%; Pred. No. 2.7e+03;
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1 cacccgctctctcgacaat 19
|||| ||| | |||| |||
Db 24 CACCTGCTGTGTCGAGAAT 6

RESULT 12
AAX87183/c
ID AAX87183 standard; DNA; 24 BP.
XX
AC AAX87183;
XX

```
DT   27-SEP-1999  (first entry)
XX
DE   Fibroblast growth factor receptor 1 gene PCR primer R/FGFR1/INTR.
XX
KW   ZNF198-FGFR1; fibroblast growth factor receptor 1; oncogene;
KW   lymphoma; leukaemia; SCLL; translocation; stem cell; diagnosis;
KW   therapy; zinc finger protein; PCR; primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9935159-A1.
XX
PD   15-JUL-1999.
XX
PF   07-JAN-1999;   99WO-US00365.
XX
PR   08-JAN-1998;   98US-0004688.
XX
PA   (BGHM ) BRIGHAM & WOMENS HOSPITAL.
XX
PI   Fletcher JA,  Xiao S;
XX
DR   WPI; 1999-430381/36.
XX
PT   Oncogene, designated ZNF198-FGFR1, useful in diagnosis of stem cell
PT   leukemia and lymphoma syndrome
XX
PS   Example; Page 65; 76pp; English.
XX
CC   This primer oligonucleotide, designated F/FGFR1/INTR, is based on
CC   an intron region of the human fibroblast growth factor receptor 1
CC   (FGFR1) gene.  It can be used for the PCR amplification of FGFR1
CC   nucleic acid sequences, especially to identify a newly discovered
CC   oncogene, ZNF198-FGFR1 (see AAX87177), which incorporates a FGFR1
CC   tyrosine kinase domain fused through t(8;13) translocation to
CC   ZNF198, and which is associated with stem cell leukaemia/lymphoma
CC   (SCLL) syndrome.  The presence of ZNF198-FGFR1 nucleic acid in a
CC   tissue or fluid sample from a patient is indicative of SCLL
CC   syndrome.
XX
SQ   Sequence 24 BP; 6 A; 7 C; 6 G; 5 T; 0 other;


  Query Match             57.3%;  Score 12.6;  DB 20;  Length 24;
  Best Local Similarity   78.9%;  Pred. No. 2.7e+03;
  Matches   15;  Conservative    0;  Mismatches    4;  Indels    0;  Gaps    0;

Qy       4 ccgctctctcgacaatgga 22
           ||||||| | ||  |||||
Db      24 CCGCTCTGTGGAAGATGGA 6


RESULT  13
AAX23266
ID   AAX23266 standard; DNA; 37 BP.
XX
AC   AAX23266;
XX
DT   11-JUN-1999  (first entry)
XX
DE   Cytomegalovirus PCR primer ISOCMV002 DNA.
XX
KW   Nucleic acid amplification; 3' overhang; strand displacing polymerase;
KW   isothermal; PCR primer; ss.
XX
OS   Synthetic.
OS   Human cytomegalovirus.
XX
PN   WO9909211-A1.
XX
PD   25-FEB-1999.
XX
PF   12-AUG-1998;   98WO-GB02427.
XX
PR   13-AUG-1997;   97GB-0017061.
XX
PA   (TEPN-) TEPNEL MEDICAL LTD.
XX
PI   Coutts JC,  Oultram JD;
XX
DR   WPI; 1999-190177/16.
XX
PT   Amplifying a nucleic acid sequence by strand displacement - None
PT   given
XX
PS   Example 2; Page 14; 41pp; English.
XX
CC   This invention describes a novel method for amplifying a nucleic acid
CC   sequence of a double-stranded molecule, using a restriction enzyme
CC   which cuts to leave a 3' overhang on the strand not to be amplified, and
CC   strand displacing polymerase. The method allows nucleic acid
CC   amplification without the inclusion of a modified restriction site
CC   required in the prior art strand displacement method, and may be
CC   effected isothermally, unlike prior art polymerase chain reaction
CC   methods.
XX
SQ   Sequence 37 BP; 6 A; 10 C; 10 G; 11 T; 0 other;


  Query Match             57.3%;  Score 12.6;  DB 20;  Length 37;
  Best Local Similarity   78.9%;  Pred. No. 2.9e+03;
  Matches   15;  Conservative    0;  Mismatches    4;  Indels    0;  Gaps    0;

Qy       4 ccgctctctcgacaatgga 22
           || || |||||||  ||||
Db      10 ccactgtctcgacggtgga 28


RESULT  14
AAT33699/c
ID   AAT33699 standard; DNA; 32 BP.
XX
AC   AAT33699;
XX
DT   28-MAY-1997  (first entry)
XX
DE   Mycobacterium heat shock protein hsp65 gene fragment PCR primer.
XX
KW   Tumour vaccine; heat shock antigen; HSA; polymerase chain reaction;
KW   PCR; ss.
XX
OS   Synthetic.
XX
PN   WO9629093-A1.
XX
PD   26-SEP-1996.
XX
PF   16-MAR-1996;   96WO-EP01142.
XX
PR   22-MAR-1995;   95DE-4010344.
XX
PA   (BOEH ) BOEHRINGER INGELHEIM INT GMBH.
XX
PI   Schweighoffer T;
XX
DR   WPI; 1996-442949/44.
XX
PT   Tumour vaccines contg. antigen for which immune response exists -
PT   made from autologous and/or allogenic tumour cells modified with
PT   antigens, which are transfected, esp. using recombinant DNA
XX
PS   Example 1; Page 21; 51pp; German.
XX
CC   Tumour vaccines which contain autologous and/or allogenous tumour cells
CC   which are modified so that they contain at least one antigen for which
```

CC an immune response already exists, are claimed. The vaccines take
CC advantage of a well defined, already extant cell immune response in the
CC host to act against tumour cells. The antigen is preferably from
CC Mycobacterium heat shock protein hsp65. The PCR primers in AAT33699
CC and AAT33700 were used in the construction of a plasmid for
CC expressing hsp65 in mouse melanoma cells.
XX
SQ Sequence 32 BP; 6 A; 8 C; 12 G; 6 T; 0 other;

Query Match 56.4%; Score 12.4; DB 17; Length 32;
Best Local Similarity 72.7%; Pred. No. 3.6e+03;
Matches 16; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy 1 cacccgctctctcgacaatgga 22
||||| |||| | ||| | ||
Db 24 CACCCCCTCTGTAGACTCTAGA 3

RESULT 15
AAF28152
ID AAF28152 standard; DNA; 42 BP.
XX
AC AAF28152;
XX
DT 02-APR-2001 (first entry)
XX
DE Primer #5.
XX
KW Vesiculovirus; vaccine; infection; cancer; ss.
XX
OS Unidentified.
XX
PN US6168943-B1.
XX
PD 02-JAN-2001.
XX
PF 03-MAY-1996; 96US-0646695.
XX
PR 04-MAY-1995; 95US-0435032.
XX
PA (UYYA) UNIV YALE.
XX
PI Rose JK;
XX
DR WPI; 2001-136716/14.
XX
PT Producing recombinant replicable vesiculovirus, useful as vaccines for
PT treating or preventing microbial infections, comprises culturing a cell
PT containing a nucleic acid for the expression of vesiculovirus
PT antigenomic RNA -
XX
PS Disclosure; Column 42; 119pp; English.
XX
CC The present invetion relates to producing a recombinant replicable
CC vesiculovirus. The method involves culturing a cell containing a first
CC recombinant nucleic acid that can be transcribed to produce an RNA
CC comprising a vesiculovirus antigenomic (+) RNA containing the
CC vesiculovirus promoter for replication and a ribozyme sequence
CC immediately downstream the antigenomic (+) RNA. The method is useful
CC for producing recombinant replicable vesiculoviruses, which can
CC be used as vaccines for the treatment or prevention of
CC infections by a pathogenic microorganism. The recombinant
CC replicable vesiculoviruses are useful in diagnosing and monitoring
CC progression of infectious disorders, including response to vaccination
CC and/or therapy, in cancer immunoprophylaxis, immunotherapy and
CC diagnosis, and monitoring of tumor progression or regression, and to
CC produce large quantities of readily purified antigen.
XX
SQ Sequence 42 BP; 14 A; 10 C; 12 G; 6 T; 0 other;

Query Match 56.4%; Score 12.4; DB 22; Length 42;
Best Local Similarity 72.7%; Pred. No. 3.7e+03;
Matches 16; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy 1 cacccgctctctcgacaatgga 22
| |||| ||| || ||||||
Db 4 cccccgggctcgagaaaatgga 25

Search completed: March 9, 2002, 01:07:00
Job time: 11946 sec

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